



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/608,724

06/26/2003

Andreas Gustafsson

PA2271US

6930

80641

7590

01/15/2010

Gard and Kaslow LLP
One 1st Street, Suite 9
Los Altos, CA 94022

EXAMINER

PATEL, HETUL B

ART UNIT

PAPER NUMBER

2186

MAIL DATE

DELIVERY MODE

01/15/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANDREAS GUSTAFSSON

Appeal 2009-003146
Application 10/608,724
Technology Center 2100

Decided: January 15, 2010

Before LEE E. BARRETT, JOSEPH L. DIXON, and
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-43. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm in part.

STATEMENT OF THE CASE

INVENTION

Appellant's invention is related generally to the field of computer science. More particularly, the invention on appeal is directed to the field of network communications. (Spec. 1).

ILLUSTRATIVE CLAIM

1. A caching server comprising:

an answer cache configured to access answer information through a flat data structure;

a referral cache configured to store referral information;
and

computer instructions configured to translate a domain name into DNS information by examining the answer cache and, responsive to the results of examining the answer cache, examining the referral cache.

PRIOR ART

Fletcher	US 2002/0178238 A1	Nov. 28, 2002
Vishin	US 5,860,146	Jan. 12, 1999
Ramanathan	US 6,182,136 B1	Jan. 30, 2001

EXTRINSIC EVIDENCE¹

Nickel	US 5,202,986	Apr. 13, 1993
--------	--------------	---------------

¹ The Examiner introduces the Nickel reference as extrinsic evidence in support of the proffered motivation rationale, i.e., that a “flatter” tree structure or “flat data structure” reduces access time. (Ans. 13, ¶2).

THE REJECTIONS

1. The Examiner rejected claims 1-9 and 11-43 under 35 U.S.C. § 103(a) as unpatentable over the combination of Fletcher and Vishin.
2. The Examiner rejected claim 10 under 35 U.S.C. § 103(a) as unpatentable over the combination of Fletcher, Vishin, and Ramanathan.

ISSUES

Appellant argues specific limitations (App. Br. 20-46) that we address *infra*. Appellant also argues that the cited references have been improperly combined. (App. Br. 29-33). The Examiner contends that the references have been properly combined and that each argued limitation is taught or would have been suggested by the combination of cited references. (Ans. 11-15). Based upon our review of the administrative record, we have determined that the following issues are dispositive in this appeal:

Issue 1: Under § 103, has Appellant shown the Examiner erred by improperly combining the cited references?

Issue 2: Under § 103, has Appellant shown the Examiner erred in rejecting representative claim 1 by finding that the combination of Fletcher and Vishin teaches or would have suggested “an answer cache configured to access answer information through a flat data structure?” (Independent claim 1).

Issue 3: Under § 103, has Appellant shown the Examiner erred in rejecting claims 2, 19, 25, 29, and 35 by finding that the combination of Fletcher and Vishin teaches or would have suggested a hash table?

Issue 4: Under § 103, has Appellant shown the Examiner erred in rejecting claim 3 by finding that the combination of Fletcher and Vishin teaches or would have suggested a flat data structure that includes pointers to a tree data structure?

Issue 5: Under § 103, has Appellant shown the Examiner erred in rejecting claim 4 by finding that the combination of Fletcher and Vishin teaches or would have suggested “wherein the flat data structure include pointers to a tree structure, and the tree data structure is configured to store answer information and referral information?”

Issue 6: Under § 103, has Appellant shown the Examiner erred in rejecting claims 11, 13, 17, 38, and 39 for the same rationale previously set forth in claim 1, when these claims recite additional limitations that are not recited in claim 1? (*See App. Br. 34-35; see also Ans. 4, ¶2*).

Issue 7: Under § 103, has Appellant shown the Examiner erred in rejecting claims 5, 27, and 28 for the same rationale previously set forth in claim 3, when these claims recite additional limitations that are not recited in claim 3? (*See App. Br. 40; see also Ans. 5, ¶2*).

Issue 8: Under § 103, has Appellant shown the Examiner erred in rejecting dependent claim 30 by finding that the combination of Fletcher and Vishin teaches or would have suggested “wherein a time required to examine the answer cache is essentially constant as a function of the number of labels comprising the domain name and essentially constant as a function of the size of the answer?”

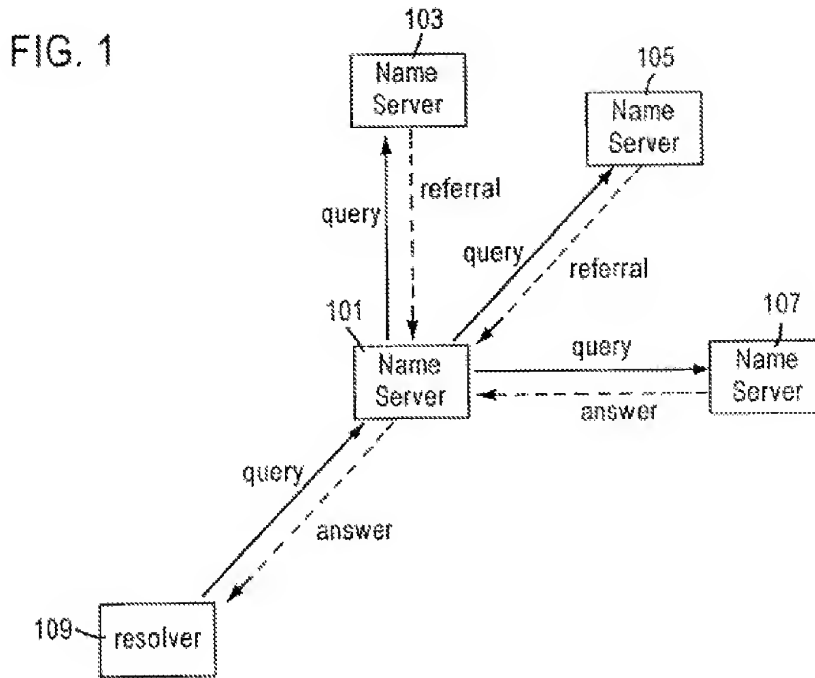
Issue 9: Under § 103, has Appellant shown the Examiner erred in rejecting representative claim 33 by finding that the combination of Fletcher and Vishin teaches or would have suggested “classifying the response received; and storing the data received in either a referral cache or an answer cache based on the classification?”

FINDINGS OF FACT

In our analysis *infra*, we rely on the following findings of fact (FF):

The Fletcher reference

1. Fletcher depicts in Figure 1 a plurality of name servers (103, 105, 107) and associated queries, answers, and referrals, as reproduced below:



Caption: Fletcher depicts in Figure 1 a plurality of name servers (103, 105, 107) and associated queries, answers, and referrals.

2. Fletcher teaches a hierarchy of name servers that includes top-level root name servers, as follows:

[0031] As seen in FIG. 1, the name server 109 sends an iterative query to name servers 103, 105, and 107 before finally finding the answer from the name server 107. On occasion, a name server that processes a recursive query may not have information regarding the "closest" name server; this scenario may arise from a recent reboot of the name server host, a totally expired cache, or a request for a top-level domain that has never before been accessed. In this case, the name server needs to obtain the data from a root name server. Per the protocol, all DNS servers have information on the location of the root name

servers, so that the search for the next closest name server is guaranteed to stop at the root name server. The name servers for the root zone resolve top-level domains (i.e., com, .gov, org, .edu, and etc.). Root name servers are fixed, and are well known resources on the Internet.

3. Fletcher teaches caching answers received from other servers, as follows:

[0032] The name servers 101, 103, 105, and 107 cache the answers that they receive from other servers. Each query response may include a time-to-live (TTL) value that informs the querying name server of the length of time to maintain that particular answer in its cache. This caching allows recursive queries to be resolved much more quickly since all the name servers along the line will have "better" referrals or the actual answer to a query.

4. Fletcher teaches address resolution using name servers, as follows:

[0034] Accordingly, the name server 101 then issues another iterative query to the name server 105 per the referral from the root name server 103. If the name server 105 has the answer in its cache, the name server 105 would provide the answer to the name server 101. However, in this example, the name server 105 does not have the answer, and thus, responds with a referral to the name server 107. Continuing with the address resolution process, the name server 101 issues another iterative query to the name server 107. In this example, the name server 107 has the requested host name (or address) in its local database; this server 107 is said to be "authoritative" because the answer does not originate from its cache. The name server 107 then replies to the name server 101 with the answer to the query. In turn, the name server 101 sends the answer to the resolver 109. At this point, the address resolution process is complete and the resolver 109 possesses the necessary address information (e.g., IP address) to forward data to the machine with associated with the IP address.

The Vishin reference

5. Vishin teaches a remote translation lookaside buffer (RTL 160, Fig. 6) that performs address mapping, as follows:

The computer system further includes a remote translation lookaside buffer (RTL), also called an auxiliary TLB, that stores a plurality of remote page table entries. Each remote page table entry represents a mapping between a range of physical addresses and a corresponding range of remote physical addresses. The primary translation lookaside buffer translates a virtual address asserted by the data processor into a physical address. When the physical address does not correspond to a location in local memory, the RTL determines whether the physical address matches at least one of the remote page table entries stored in the RTL, and selects one of those remote page table entries when at least one match is found. Then, a remote physical address is generated by combining a portion of the selected remote page table entry with a portion of the physical address. (Col. 3, ll. 46-61).

Appellant's Specification

6. Appellant's Specification states that "in some embodiments, the flat data structure of Answer Cache 165 includes pointers (e.g. index values or memory addresses, etcetera) to another data structure in place of answer information." (Spec. 15, ¶ [0040]).

PRINCIPLES OF LAW

"What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 419 (2007). To be nonobvious, an improvement must be "more than the predictable use of prior art elements according to their established functions." *Id.* at 417.

Invention or discovery is the requirement which constitutes the foundation of the right to obtain a patent . . . unless more ingenuity and skill were required in making or applying the said improvement than are possessed by an ordinary mechanic acquainted with the business, there is an absence of that degree of skill and ingenuity which constitute the essential elements of every invention.

Dunbar v. Myers, 94 U.S. 187, 197 (1876) (citing *Hotchkiss v. Greenwood*, 52 U.S. 248, 267 (1850)) (*Hotchkiss v. Greenwood* was cited with approval by the Supreme Court in *KSR*, 550 U.S. at 406, 415, 427).

Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006). Therefore, we look to Appellant's Briefs to show error in the Examiner's proffered prima facie case.

ANALYSIS

At the outset, we consider Appellant's arguments in the Briefs only to the extent that such arguments are directed to claimed subject matter.²

² Patentability is based upon the claims. "It is the claims that measure the invention." *SRI Int'l v. Matsushita Elec. Corp. of America*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (*en banc*). A basic canon of claim construction is that one may not read a limitation into a claim from the written description. *Renishaw plc v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998).

ISSUE 1

Threshold question of combinability under § 103

We decide the question of whether Appellant has shown that the Examiner erred by improperly combining the cited references under § 103.

Appellant makes the following contentions: (1) Fletcher and Vishin are not analogous art, (2) the Examiner has not provided a reasonable expectation of success, (3) the Examiner is improperly modifying the teachings of Vishin, and (4) the Examiner has not provided a sufficient motivation to combine Fletcher and Vishin. (App. Br. 29-33).

Regarding Appellant's first contention, we find that each of the references relied on by the Examiner is directed to the same *general* field of endeavor as the instant invention on appeal, i.e., computer network communication, including network address mapping and resolution. (See FF 1-5). Thus, we agree with the Examiner's finding that Fletcher and Vishin are each reasonably pertinent to the particular problem with which the inventor is involved. (Ans. 12). Therefore, we find each of the cited references is analogous art to the claimed invention.³

³ "Whether a reference in the prior art is analogous is a fact question." *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992) (citing *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568 n.9 (Fed. Cir. 1987)). Two criteria have evolved for answering the question: "(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." *Id.* at 658-59 (citing *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986); *In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979)).

Moreover, the Supreme Court has determined that the conclusion of obviousness *can* be based on the interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art, and an obviousness “analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418. *See also Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368 (Fed. Cir. 2006).

Here, it is our view that an artisan possessing common sense and creativity at the time of the invention would have been familiar with various methods of network address mapping and resolution (*See* FF 1-5). We are mindful that the Supreme Court has clearly stated that the “combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results,” *KSR* 550 U.S. at 401.

This reasoning is applicable here. Given the breadth of Appellant’s claims, we are not persuaded that combining the respective familiar elements of the cited references in the manner proffered by the Examiner was “uniquely challenging or difficult for one of ordinary skill in the art” (*see Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418)). Therefore, we find the Examiner’s proffered combination of familiar prior art elements (*e.g.*, a cache and a flat data structure) according to their established functions would have conveyed a reasonable expectation of success to a person of ordinary skill having common sense at the time of the invention.

We are also not persuaded that: (3) the Examiner has improperly modifying the teachings of Vishin, or (4) that the Examiner has not provided a sufficient motivation to combine Fletcher and Vishin. (App. Br. 31-32). To the contrary, we agree with the Examiner that Vishin's RTLB 160 reasonably teaches or would have suggested the use of a "flat" (i.e., non-tree) data structure (see discussion *infra*). We also note the Examiner has supported the proffered motivation statement (Ans. 4) with extrinsic evidence (Nickel reference) purportedly showing that a "flatter" tree structure or "flat data structure" may reduce access time. (Ans. 13, ¶2; *see* Note 1 *supra*). We particularly note that this new extrinsic evidence has not been addressed by the Appellant in the Reply Brief.

Lastly, we note that Appellant has not rebutted the Examiner's legal conclusion of obviousness by showing that the claimed combination of familiar elements produces any new function. Appellant has not provided any factual evidence of secondary considerations, such as unexpected or unpredictable results, commercial success, or long felt but unmet need.

Therefore, we find Appellant's arguments unavailing regarding the combinability of the cited Fletcher and Vishin (and Ramanathan) references for essentially the same reasons proffered by the Examiner in the Answer (4, 13-14), and as further discussed above. Accordingly, we find Appellant has not shown the Examiner erred by improperly combining the cited references under § 103.

Issue 2

Limitations under § 103

We decide the question of whether Appellant has shown the Examiner erred in rejecting representative claim 1 by finding that the combination of Fletcher and Vishin teaches or would have suggested “an answer cache configured to access answer information through a flat data structure.” (Independent claim 1).

Appellant attempts to distinguish the claimed “answer cache” by stating that “[o]ne of ordinary skill in the art would understand ‘answer information’ to include, for example, an Internet Protocol (IP) address provided in response to [a] DNS request.” (App. Br. 28). Appellant further avers that “[o]ne of ordinary skill would not expect ‘answer information’ as received from an ‘answer cache’ to include ‘a remote physical address’ [as taught by Vishin].” (*Id.*). However, we note that IP addresses (or any other types of addresses) are not recited in claim 1; therefore, we find this point of argument unavailing.

We find Fletcher teaches caching answers received from other servers (FF 3). The Examiner merely looks to the secondary Vishin reference for teaching or suggesting the claimed “flat data structure.” (Ans. 3-4, 11; claim 1).

We particularly note that Appellant’s Specification states that “in some embodiments, the flat data structure of Answer Cache 165 includes pointers (e.g. index values or memory addresses, etcetera) to another data structure in place of answer information.” (FF 6, underline added). We find Vishin’s RTLB 160 performs memory address translation (i.e., address

mapping or conversion), and therefore contains memory addresses (i.e., pointers) in a “flat” i.e., “non-tree” data structure (table) (FF 5). Appellant is arguing the Vishin reference in isolation.

We note that “[t]he test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art.” *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991) (citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981)). “Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references.” *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (citing *Keller*, 642 F.2d at 425). In determining obviousness, a reference “must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole.” *Id.*

This reasoning is applicable here. We note that the Examiner’s rejection is based upon the combined teachings of Fletcher and Vishin. Moreover, the Appellant has not rebutted with any substantive argument the Examiner’s finding that Vishin’s RTLB (FF 6; Fig. 6) “is a table which is a flat (single-layer) data structure and not a tree (multi-layer) data structure.” (Ans. 13, ¶1). Therefore, we find Appellant has not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner’s § 103 rejection of representative claim

1, and associated dependent claims 6-9 and 43 (not argued separately) that fall therewith. Based upon Appellant's arguments in the principal Brief, claims 26 and 34 also fall with claim 1. (App. Br. 28-34).⁴

Appellant further contends that claim 10 (that depends from claim 1) should be overturned for the same reasons as claim 1. (App. Br. 46). For the same reasons discussed *supra* regarding claim 1, we find Appellant has not shown error in the Examiner's rejection of claim 10 as being obvious over the combination of Fletcher, Vishin, and Ramanathan.

Issue 3

Limitations under § 103

We decide the question of whether Appellant has shown the Examiner erred in rejecting claims 2, 19, 25, 29, and 35 by finding that the combination of Fletcher and Vishin teaches or would have suggested a hash table.

⁴ When multiple claims subject to the same ground of rejection are argued as a group by appellant, the Board may select a single claim from the group of claims that are argued together to decide the appeal with respect to the group of claims as to the ground of rejection on the basis of the selected claim alone. Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellant contends that even if one were to assume, *arguendo*, that Vishin's RTLB 160 is a flat data structure, it is clearly not a hash table. (App. Br. 37). The Examiner counters that "a hash table is nothing but a table that associates keys with values." (Ans. 14, §2).

Based upon our review of Vishin, we find no literal disclosure of a hash table regarding the description of Vishin's RTLB 160 (FF 5; Fig. 6), or elsewhere in the Vishin reference. Moreover, while the Examiner's statement that a hash table associates keys with values (i.e., indexes) is technically correct, we find the Examiner has not established in the record that the association between the keys and the values (indexes) purportedly shown or suggested by Vishin's RTLB 160 is created via any type of hash function. The hash function is necessary to transform each key into an index value; otherwise, there is no hash table. Because Vishin is silent regarding any hash table having a requisite hash function, we find the weight of the evidence supports Appellant's argument that Vishin fails to provide a teaching or fair suggestion of the claimed hash table. Because we find the Fletcher reference fails to overcome this deficiency, we find Appellant has shown the Examiner erred in rejecting claims 2, 19, 25, 29, and 35 as being unpatentable over the combination of Fletcher and Vishin. Because claim 19 is an independent claim, we also reverse the Examiner's § 103 rejection of associated dependent claims 20-24.

Issue 4

Limitations under § 103

We decide the question of whether Appellant has shown the Examiner erred in rejecting representative claim 3 by finding that the combination of Fletcher and Vishin teaches or would have suggested a flat data structure that includes pointers to a tree data structure.

We have found *supra* that Vishin's RTLB 160 performs memory address translation (i.e., address mapping or conversion), and therefore contains memory addresses (pointers) in a "flat" i.e., "non-tree" data structure (table) (FF 5). We find Fletcher teaches a hierarchy (i.e., tree structure) of name servers that includes top-level root name server. (FF 1-2). Because pointers are merely addresses that point to data, we find Appellant's argument (App. Br. 39) that the Examiner's proffered combination of Fletcher and Vishin does not teach or even suggest "pointers" is unsupported by the evidence of record (*See e.g.*, FF 5).

Appellant persists in arguing that even if it were assumed that the RTLB 160 of Vishin included a pointer, there does not appear to be any teaching of DNS information in Vishin, much less the hypothetical pointers that point to DNS information. (App. Br. 39). We also find this line of argument to be unavailing, because we find Fletcher teaches domain name servers and associated DNS information. (FF 1-4). (Claim 1 actually recites the DNS information. Claim 3 depends from claim 1).

"[W]hen a patent 'simply arranges old elements with each performing the same function it had been known to perform' and yields no more than one would expect from such an arrangement, the combination is obvious." *KSR* at 417 (citing *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282 (1976)).

Because we find familiar old elements such as pointers, flat data structures and tree data structures may readily combined by an artisan with predictable results, we conclude that Appellant's claim 3 would have been obvious to an artisan having knowledge of the combined teachings and suggestions of Fletcher and Vishin. Therefore, we find Appellant has not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's § 103 rejection of claim 3.

Issue 5

Limitations under § 103

We decide the question of whether Appellant has shown the Examiner erred in rejecting representative claim 4 by finding that the combination of Fletcher and Vishin teaches or would have suggested “wherein the flat data structure includes pointers to a tree structure, and the tree data structure is configured to store answer information and referral information?”

Appellant focuses on the Vishin reference in isolation and avers that these limitations allowable over Fletcher in view of Vishin. (App. Br. 42).

We disagree. To the contrary, we agree with the Examiner that Fletcher teaches or would have suggested a tree data structure (name server hierarchy – FF 1-2) that is configured to store answer information and referral information (FF 1, 4). We have addressed *supra* the limitation of the flat data structure (Vishin's RTL 160) that would have included pointers (addresses) to a tree structure in the Examiner's proffered combination (Fletcher's name server hierarchy – *see* FF 1-2). For at least these reasons,

we find Appellant has not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's § 103 rejection of claim 4.

Issue 6

Limitations under § 103

We decide the question of whether Appellant has shown the Examiner erred in rejecting claims 11, 13, 17, 38, and 39 for the same rationale previously set forth in claim 1, when these claims recite additional limitations that are not recited in claim 1. (*See* App. Br. 34-35; *see also* Ans. 4, ¶2).

The Examiner rejects the aforementioned claims as follows: “As per claims 11, 13, 17, 26, 34 and 38-39, see arguments with respect to the rejection of claim 1. Claims 11, 13, 17, 26, 34 and 38-39 are also rejected based on the same rationale as the rejection of claim 1.” (Ans. 4).

Based upon our review of the record, we *pro forma* reverse the Examiner's rejection of claims 11, 13, 17, 38, and 39 for the same reasons argued by Appellant in the Brief, i.e., the additional limitations recited in these claims have not been addressed by the Examiner. Therefore, we agree with Appellant that no prima facie case of obviousness has been established. Because claims 11, 13, and 17 are independent claims, we also reverse the Examiner's § 103 rejection of associated dependent claims 12, 14-16, and 18.

Issue 7

Limitations under § 103

We decide the question of whether Appellant has shown the Examiner erred in rejecting 5, 27, and 28 for the same rationale previously set forth in claim 3, when these claims recite additional limitations that are not recited in claim 3. (*See* App. Br. 40; *see also* Ans. 5, ¶2).

Based upon our review of the record, we *pro forma* reverse the Examiner's rejection of claims 5, 27, and 28 for the same reasons argued by Appellant in the Brief, i.e., the additional limitations recited in these claims have not been addressed by the Examiner. Therefore, we agree with Appellant that no prima facie case of obviousness has been established.

Issue 8

Limitations under § 103

We decide the question of whether Appellant has shown the Examiner erred in rejecting dependent claim 30 by finding that the combination of Fletcher and Vishin teaches or would have suggested "wherein a time required to examine the answer cache is essentially constant as a function of the number of labels comprising the domain name and essentially constant as a function of the size of the answer."

Appellant argues that the aforementioned limitations are not normal characteristics of flat data structures. (App. Br. 44-45).

The Examiner points to Fletcher's paragraph [0008] as evidence to support the rejection of claims 14, 15, and 30. (Ans. 6-7). For convenience, we reproduce Fletcher's paragraph [0008] below:

[0008] The present invention addresses the above stated needs by providing a terminal with the capability to cache address information, such that a host that is local to the terminal may submit a query to retrieve the address information that is stored within the terminal. In response to a cache hit, the terminal transmits the address information corresponding to the query to the requesting local host. The query from the local host may also be forwarded by the terminal across a communications network, such as a satellite network, to a server that stores the requested address information. Upon receiving the requested address information, the terminal refreshes the cache.

Because we find no support for the Examiner's rejection regarding at least the recited (and argued) "essentially constant" time limitations, we find Appellant has shown the Examiner erred regarding the §103 rejection of dependent claim 30.

Issue 9

Limitations under § 103

We decide the question of whether Appellant has shown the Examiner erred in rejecting representative claim 33 by finding that the combination of Fletcher and Vishin teaches or would have suggested "classifying the response received; and storing the data received in either a referral cache or an answer cache based the classification."

We note that Appellant merely restates the Examiner's remarks and makes the follow assertion:

"The Appellant has reviewed *Fletcher*, and in particular those paragraphs cited by the Examiner, however, the Appellant is unable to identify any teaching of 'classifying the response received; and storing the

data received in either a referral cache or an answer cache based the classification,” as recited in Claim 33.” (App. Br. 46).

Appellant argues claims 33, 36, 37, and 40 as a group. (*Id.*). We select claim 33 as the representative claim for this group. *See* 37 C.F.R. § 41.37(c)(1)(vii). We find Fletcher teaches or would have suggested the use of answer and referral caches, as claimed (*See* FF 1 and 4). As for the argued “classification,” we find Fletcher teaches that “[e]ach query response may include a time-to-live (TTL) value [i.e., classification] that informs the querying name server of the length of time to maintain that particular answer in its cache.” (FF 4). Therefore, we find the combination of Fletcher and Vishin teaches or would have suggested the argued limitations of “classifying the response” and “storing the data received in *either* a referral cache or an answer cache based on the classification,” as recited in representative claim 33. (emphasis added). Accordingly, we find Appellant has not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner’s § 103 rejection of representative claim 33 and claims 36, 37, and 40 that fall therewith. *See* 37 C.F.R. § 41.37(c)(1)(vii).

CONCLUSIONS

Appellant has not shown the Examiner erred in rejecting claims 1, 3, 4, 6-9, 26-28, 31-34, 36, 37, and 40-43 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Fletcher and Vishin.

Appellant has not shown the Examiner erred in rejecting claim 10 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Fletcher, Vishin, and Ramanathan.

Appellant has shown the Examiner erred in rejecting claims 2, 5, 11-25, 29, 30, and 35, 38, and 39 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Fletcher and Vishin.

ORDER

We affirm the Examiner's decision rejecting claims 1, 3, 4, 6-10, 26-28, 31-34, 36, 37, and 40-43 under 35 U.S.C. § 103(a).

We reverse the Examiner's decision rejecting claims 2, 5, 11-25, 29, 30, and 35, 38, and 39 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

pgc

Gard and Kaslow LLP
One 1st Street, Suite 9
Los Altos CA 94022